IN THE ABSTRACT:

Please replace the paragraph beginning on page 51, line 1 with the following:

ABSTRACT OF THE DISCLOSURE

A functionalized active-nucleus complex sensor that selectively associates with one or more target species, and a method for assaying and screening for one or a plurality of target species utilizing one or a plurality of functionalized active-nucleus complexes with at least two of the functionalized active-nucleus complexes having an attraction affinity to different corresponding target species. The functionalized active-nucleus complex ~~comprises~~ has an active-nucleus and a targeting carrier. ~~The targeting carrier comprises a first binding region having at least a minimal transient binding of the active-nucleus to form the functionalized active-nucleus complex that produces a detectable signal when the functionalized active-nucleus complex associates with the target species and a second binding region that selectively associates with the target species. Included is a method for assaying and screening for one or a plurality of target species utilizing one or a plurality of functionalized active-nucleus complexes with at least two of the functionalized active-nucleus complexes having an attraction affinity to different corresponding target species.~~ The method ~~comprises the steps of~~ involves functionalizing an active-nucleus, for each functionalized active-nucleus complex, by incorporating the active-nucleus into a macromolucular or molecular complex that is capable of binding one of the target species~~. Then~~ and then bringing the macromolecular or molecular complexes into contact with the target species and detecting the occurrence of or change in a nuclear magnetic resonance signal from each of the active-nuclei in each of the functionalized active-nucleus complexes ~~in order to either monitor the occurrence of binding between each of the functionalized active-nucleus complexes and the target species or monitor a subsequent change in the environment of the target species after the binding occurs~~.